

U.S. Serial No. 09/462,845

DRAFT A2

9. An expression vector comprising nucleic acid encoding SP1.

11. A method for the production of a heterologous protein in a *Bacillus* host cell comprising the steps of

- obtaining a *Bacillus* host cell comprising nucleic acid encoding said heterologous protein wherein said host cell contains a mutation or deletion in the gene encoding serine protease 1;
- growing said *Bacillus* host cell under conditions suitable for the expression of said heterologous protein.

Please insert new claims 17-21.

R126 16. (New) The method of Claim 11 wherein said *Bacillus* cell is selected from the group consisting of *Bacillus subtilis*, *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.

SWS R8 17 16. (New) The method of Claim 16 wherein said *Bacillus* host cell further comprises a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

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18. (New) A gram-positive microorganism having a mutation or deletion in the gene encoding serine protease 1.

19 18. (New) The microorganism of Claim 1 or 19 further comprising a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

20 21. (New) A cleaning composition comprising SP1.

Thus, the claims as currently presented and under consideration, are presented below for the Examiner's convenience and to comply with 37 CFR §1.121:

- (Amended) A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding SP1 said mutation or deletion resulting in the inactivation of the SP1 proteolytic activity.

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2. The gram-positive microorganism according to Claim 1 that is a member of the family *Bacillus*.
3. The microorganism according to Claim 2 wherein the member is selected from the group consisting of *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. laetus* and *Bacillus thuringiensis*.
4. The microorganism of Claim 1 wherein said microorganism is capable of expressing a heterologous protein.
5. The microorganism of Claim 4 wherein said heterologous protein is selected from the group consisting of hormone, enzyme, growth factor and cytokine.
6. The microorganism of Claim 5 wherein said heterologous protein is an enzyme.
7. The microorganism of Claim 6 wherein said enzyme is selected from the group consisting of a proteases, carbohydrases, and lipases; isomerases such as racemases, epimerases, tautomerases, or mutases; transferases, kinases and phosphatases.
9. (Amended) An expression vector comprising nucleic acid encoding SP1.
10. A host cell comprising an expression vector according to Claim 9
11. (Amended) A method for the production of a heterologous protein in a *Bacillus* host cell comprising the steps of
 - (a) obtaining a *Bacillus* host cell comprising nucleic acid encoding said heterologous protein wherein said host cell contains a mutation or deletion in the gene encoding serine protease 1;
 - (b) growing said *Bacillus* host cell under conditions suitable for the expression of said heterologous protein.

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Rule 12b

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17. (New) The method of Claim 11 wherein said *Bacillus* cell is selected from the group consisting of *Bacillus subtilis*, *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.

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18. (New) The method of Claim 17 wherein said *Bacillus* host cell further comprises a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

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19. (New) A gram-positive microorganism having at mutation or deletion in the gene encoding serine protease 1.

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20. (New) The microorganism of Claim 19 further comprising a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

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21. (New) A cleaning composition comprising SP1.